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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/941,824	08/29/2001	Olaf Storbeck	P2000,0186	7556
24131	7590	07/27/2004	EXAMINER	
LERNER AND GREENBERG, PA P O BOX 2480 HOLLYWOOD, FL 33022-2480			FOURSON III, GEORGE R	
			ART UNIT	PAPER NUMBER
			2823	

DATE MAILED: 07/27/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

amv

**Office Action Summary**

Application No.	Applicant(s)	
09/941,824	STORBECK, OLAF	
Examiner	Art Unit	
George Fourson	2823	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 07 May 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,5,6 and 8-11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,5,6 and 8-11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1 and 8-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamada et al..

The rejection is maintained as stated in the paper mailed 1/12/04.

Applicant argues that the wafer size of Yamada et al is less than the recited wafer size. However the use of 150 mm wafers is merely exemplified by Yamada et al (col.4, lines 54-60).

Applicant argues that the recited spacing is not within the range that one of ordinary skill in the art would have had a reasonable expectation of success when employing and would not have been arrived at through routine experimentation for that reason. However, the disclosure in col.1, lines 1-55, indicates that use of a curved susceptor such as in fig.8c wherein the wafer is heated by heat transferred and radiated from the susceptor was known at the time of applicant's invention. The reference further there indicates that thermal stress was known to give rise to displacement of crystal planes and that various configurations to control the radial temperature gradient were investigated. In view of this disclosure one of ordinary skill in the art would have expected the shape including the amount of curvature of a susceptor such as shown in figure 8c to be a matter of routine optimization and would have arrived and the recited configuration through routine experimentation when using 300 mm wafers. Further, the distances pointed to by applicant are not for the susceptor of fig.8c.

Applicant's argument regarding disclosure that the wafer "always touches or thermally contacts the chuck surface at its perimeter only" is drawn to subject matter that is not required by the claims. The susceptor suggested by Yamada et al as discussed above is capable of performing the recited function.

Art Unit: 2823

Applicant argues that the susceptor of Yamada does not contact the perimeter edge of the wafer. However, as stated in the office action mailed 1/12/04, the susceptor of fig.8c contacts the perimeter edge of the wafer because it contacts a narrow portion of the wafer adjacent to the border of the wafer.

Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yamada et al as applied to claims 1 and 8-11 above, and further in view of Martin et al.

Martin is applied as stated in the office action mailed 1/12/04.


Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yamada et al as applied to claims 1 and 8-11 above, and further in view of Wolf, Vol.1.

Wolf, Vol.1, is applied as stated in the office action mailed 1/12/04.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group Receptionist whose telephone number is (571) 272-2800. See MPEP 203.08.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to examiner George Fourson whose telephone number is (571)272-1860. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Olik Chaudhuri, can be reached on (571)272-1855. The fax number for this group is (571)273-0224 and the customer service number for group 2800 is 571-272-2815. Updates can be found at <http://www.uspto.gov/web/info/2800.htm>.

  
George Fourson  
Primary Examiner  
Art Unit 2823

GFourson  
July 25, 2004